



JUNE 28 - 30, 2005 NORFOLK CONVENTION CENTER

Introduction to Naval Integrated Fire Control-Counter Air (NIFC-CA)

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NIFC-CA Evolution



- 1997 Initial Land Attack Cruise Missile defense (LACM-d) effort in response to 1994 DSB summer studies for CM defense
- 1998 Navy Overland Cruise Missile Defense (OCMD) charter signed. Work begins on ADSAM capability
- 2001 PEO(T) begins work on Air Directed Air to Air Missile (ADAAM) capability. In October, Navy responds to March 2001 Theater Air and Missile Defense CRD.

Name changes to Navy Offensive Counter Air (OCA) was to better reflect a shift from Defensive to extended range Offensive Air Defense.

Naval Integrated Fire Control Counter Air (Naval IFC CA) MNS drafted.
- 2002 Naval IFC Flag Officer Steering Committee directs the Naval IFC effort to include both ADSAM and ADAAM capabilities.

The responsibilities for Naval Integrated Fire Control – Counter Air (NIFC-CA) formally captured in joint direction from ASN-RDA and the VCNO
- 2004 NIFC-CA effort broadened further during the Nov 2004 EXCOMM when direction was given to integrate the USN and USA IFC efforts

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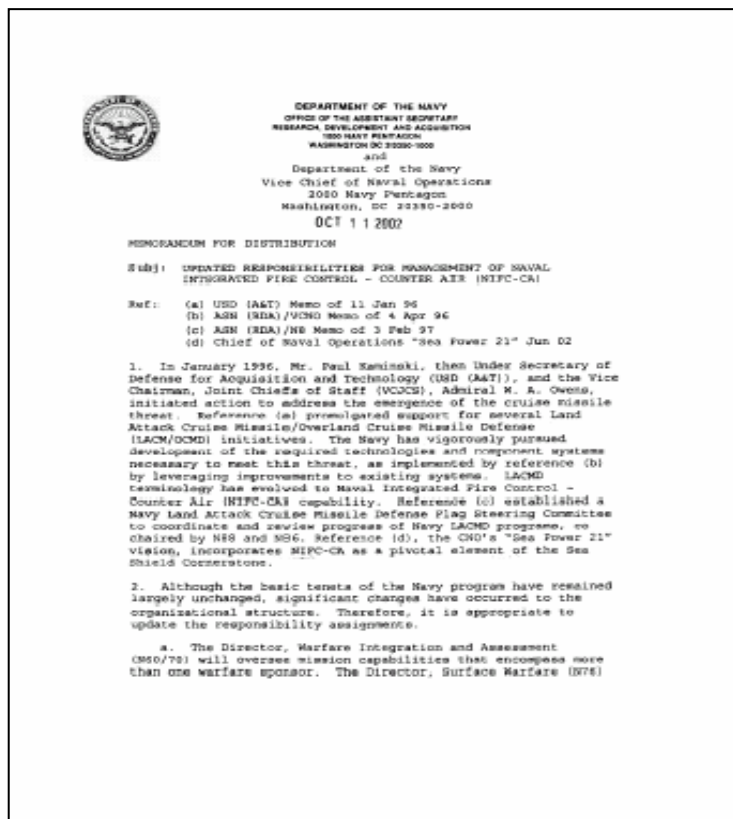


Project NIFC-CA



VCNO/ASN RDA Letter

“Updated Responsibilities for Management of Naval Integrated Fire Control - Counter Air (NIFC-CA)”, 11 OCT 02



- Program Executive Officer for Integrated Warfare Systems, PEO IWS, is assigned overall program management and system integration responsibility for NIFC-CA. PEO IWS will be assisted by the Program Executive Officer, Tactical Air Programs, PEO T, the Office of Naval Research (ONR/N091D), the NIFC-CA element program managers, the acquisition agents, and the cognitive office within the USMC Forces Systems Command to best support NIFC-CA development.

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Sea Shield Is Power Projection

Naval Air Defense Strategy



“Perhaps the most dramatic advancement promised by Sea Shield will be the ability of naval forces to project defensive power deep overland, assuring friends and allies while protecting joint forces ashore.”

“A next-generation long-range surface-to-air Standard Missile, modernized E-2 Hawkeye radar, and Cooperative Engagement Capability will combine to extend sea-based cruise missile defense far inland.”

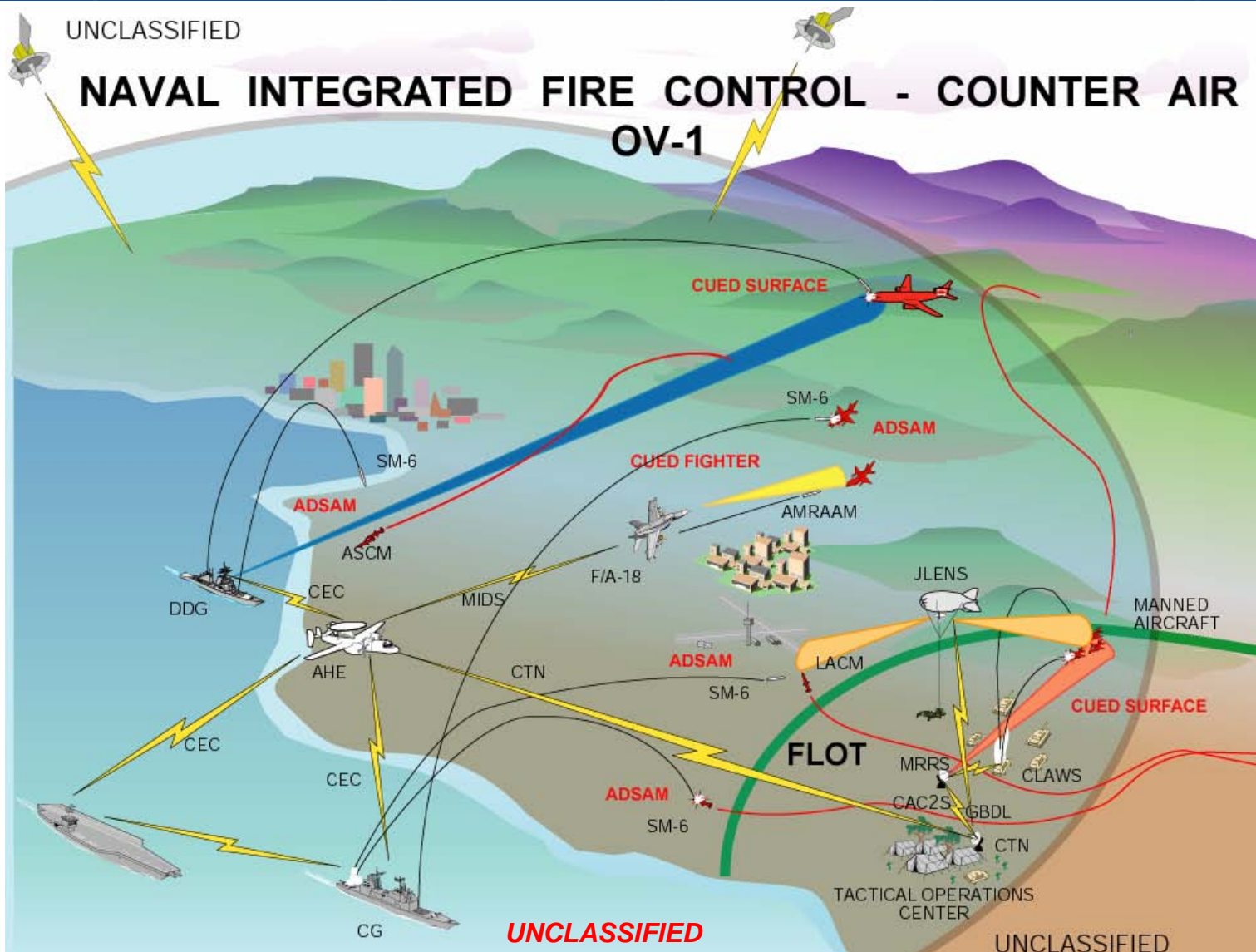
ADM Vern Clark, October 2002
“Sea Power 21: Projecting
Decisive Joint Capabilities”

NIFC-CA IS AN ENABLER FOR SEA SHIELD

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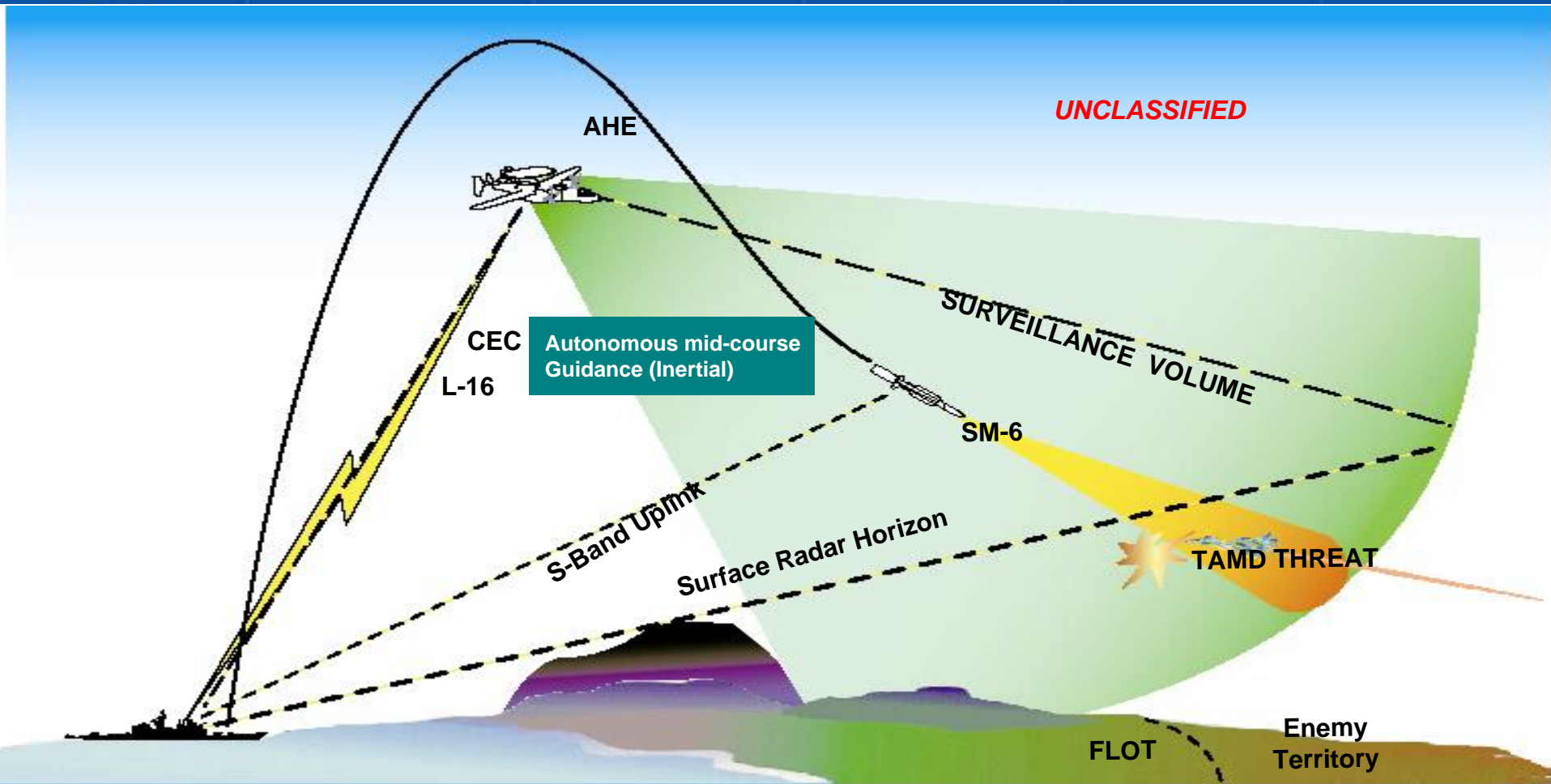
NIFC-CA Operational View





NIFC-CA CONCEPT

ADSAM Kill Chain

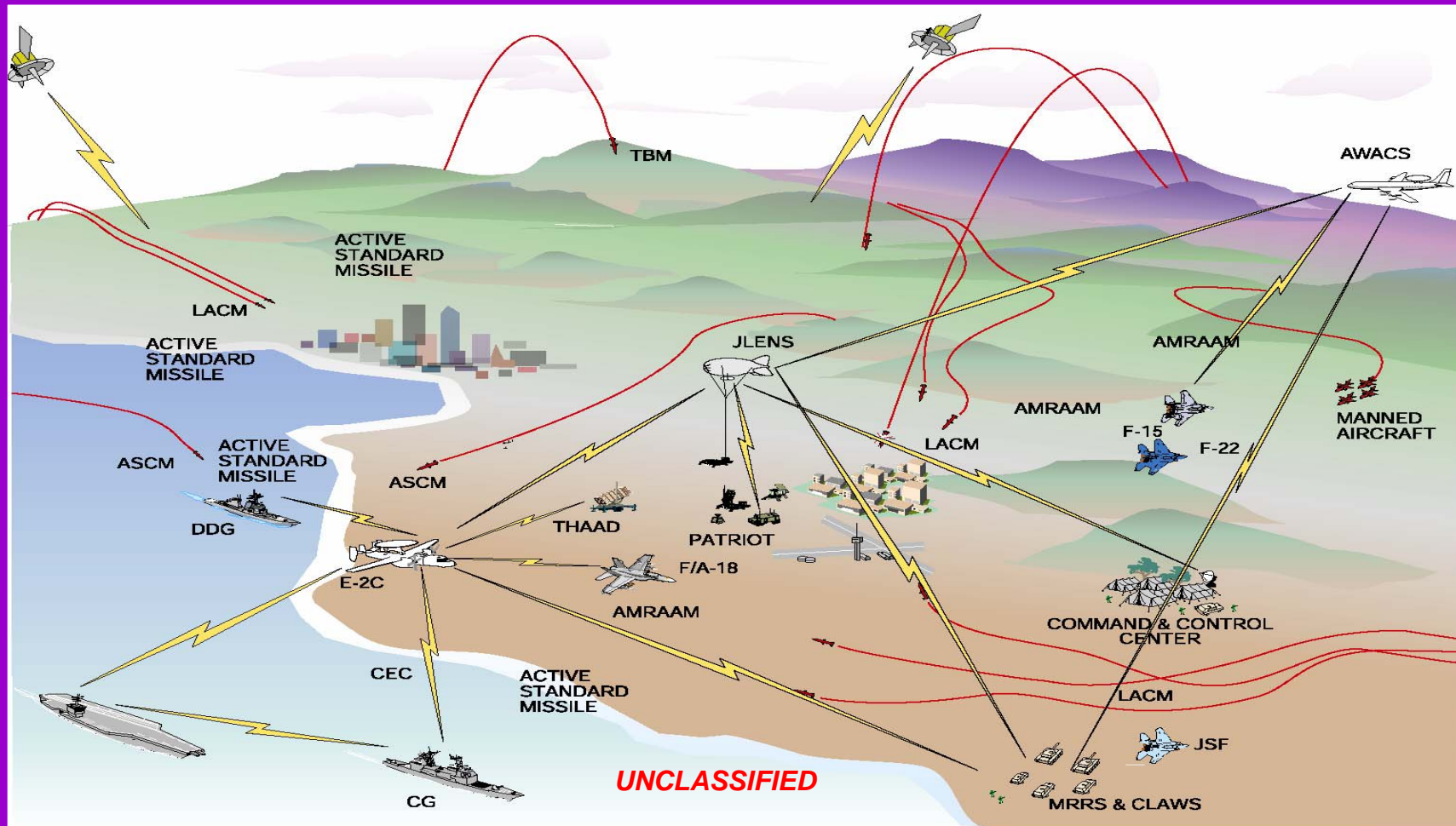


**EXTENDS ENGAGEMENT RANGE OUT TO MAXIMUM RANGE
OF INTERCEPTOR MISSILES**



JOINT INTEGRATED AIR DEFENSE

Joint Theater Context



JOINT INTEGRATED KILL CHAIN



NIFC-CA Development



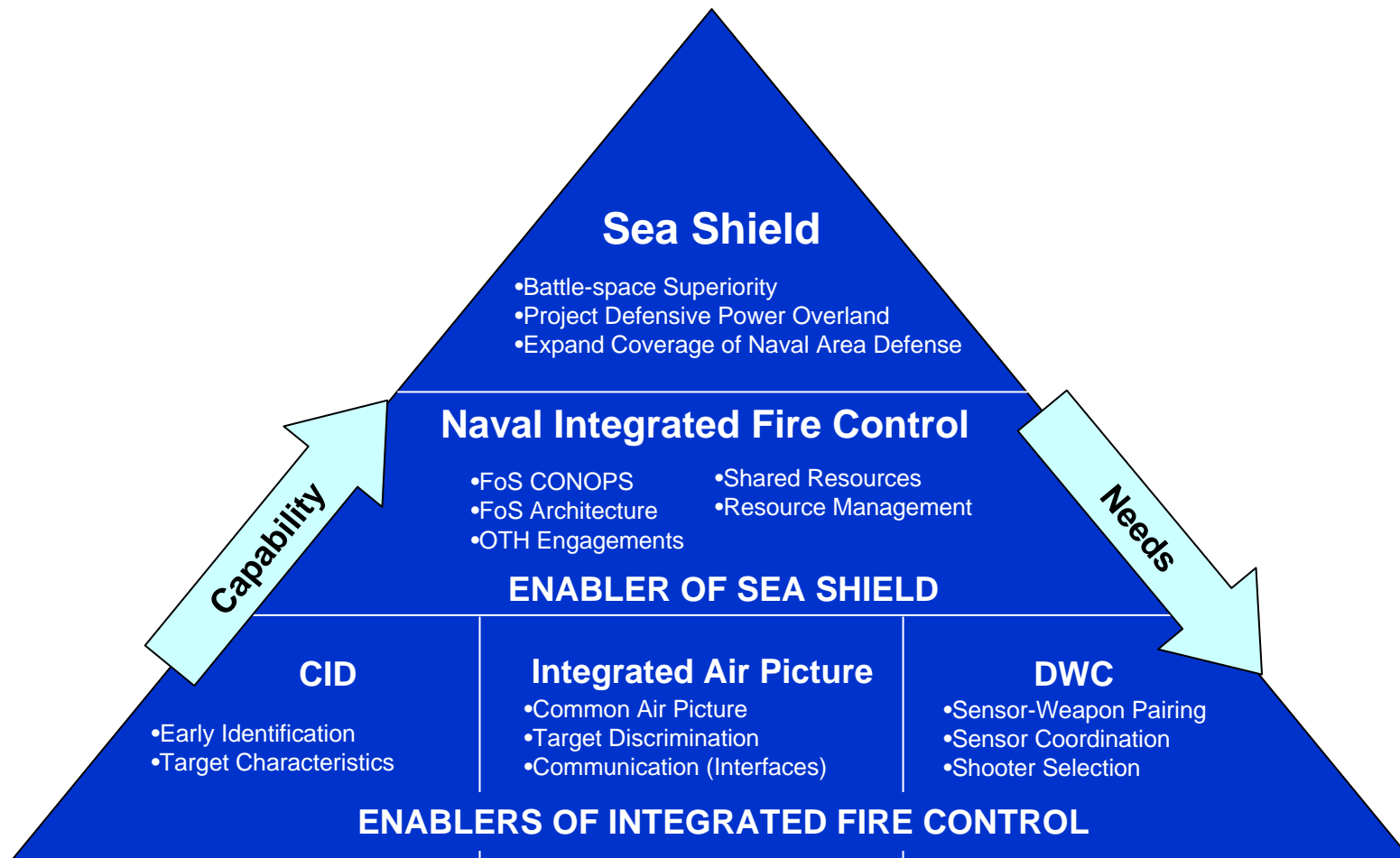
- Based on Mature Technology for *Real-Time* Integrated Fire Control
- Capability Defined by a Family of Curves
 - Manned Aircraft at Maximum Kinematic Range of Missile
 - Low Flyer / Cruise Missile, Over Land
- CONOPS Can Improve Performance
- Architecture Facilitates Joint Integration
 - Working in Parallel with Other Services

Deliver NIFC-CA Capability in 2014

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NIFC-CA Enablers



**Implementation of NIFC-CA Relies on
Key Enablers: CID, SIAP, DWC**

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Summary



- NIFC-CA will extend engagement to the full kinematic range of interceptor missiles
- Combat Identification, Single Integrated Air Picture and Distributed Weapons Coordination are NIFC-CA enablers
- NIFC-CA will be fully interoperable with the Joint Services